

Please amend Claim 27 to read as follows:

27. (Amended) Mateable electrical connectors, comprising:

a first electrical connector having at least one first power contact, and at least one first signal contact; and

a second electrical connector having at least one second power contact mateable with the at least one first power contact, and at least one second signal contact mateable with the at least one first signal contact;

the at least one first power contact having a body portion with opposed contact fingers extending therefrom, thereby providing a surface area sufficiently broad to radiate heat resulting from electrical power dissipation;

the at least one second power contact having opposed contact surfaces, thereby also providing a surface area sufficiently broad to radiate heat resulting from electrical power dissipation;

wherein upon mating the first electrical connector with the second electrical connector, the contact fingers deflect inwardly upon insertion between the opposed contact surfaces, thereby exerting force against the opposed contact surfaces.

Add new claims 38-54 as follows:

38. An electrical connector assembly, comprising:

a first electrical connector comprised of an insulative housing having a front mating face with both signal contacts and power contacts positioned within the housing, the signal contacts being positioned within the housing with mating contact portions adjacent said front mating face, and said

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power contacts being profiled as male contacts having a contact section comprised of opposed contact arms interconnected along a side edge thereof with at least one portion extending forwardly from each of said contact arms to define contact fingers positioned adjacent said front mating face; and

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a second electrical connector profiled for mating with said first electrical connector, said second electrical connector including a housing complementary with said first electrical connector, and including signal and power contacts which are complementary with respective signal and power contacts of said first electrical connector, said power contacts of said second electrical connector being profiled as female contacts having contact portions profiled for overlapping engagement with said contact fingers of said first connector.

39. The electrical connector assembly of claim 38, wherein said signal and power contacts of said first and second connector further include termination sections for termination to further conductors.

40. The electrical connector assembly of claim 39, wherein said termination sections for said signal and power contacts of said first connector are profiled as printed circuit board contact sections.

41. The electrical connector of claim 40, wherein each power contact has a plurality of printed circuit board contact sections.

42. The electrical connector assembly of claim 39 wherein said termination sections for said signal and power contacts of said first connector are profiled as wire termination sections.

43. The electrical connector assembly of claim 38, wherein said first and second connectors each comprise a like plurality of rows of signal contacts.

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cont  
44. The electrical connector assembly of claim 43, wherein housings for said first and second connectors include a plurality of rows and columns of contact receiving cavities for said signal contacts.

45. The electrical connector assembly of claim 44, wherein said power contacts of said first and second connectors have greater mass than said signal contacts of said first and second connectors.

46. The electrical connector assembly of claim 45, wherein said power contacts of said first and second connectors are positioned in power contact receiving cavities which occupy a transverse envelope of a plurality of rows of signal contacts.

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47. The electrical connector assembly of claim 46, wherein said opposed contact arms of the power contacts of said first electrical connector are formed as planar sections, substantially parallel to each other.

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over  
48. The electrical connector assembly of claim 46,  
wherein said female contacts of said second electrical  
connector are formed as planar sections, substantially  
parallel to each other.

49. The electrical connector assembly of claim 38,  
wherein said opposed contact arms of the power contacts of  
said first electrical connector are formed as planar sections,  
substantially parallel to each other.

As  
cont  
50. The electrical connector assembly of claim 49,  
wherein said female contacts of said second electrical  
connector are formed as planar sections, substantially  
parallel to each other.

51. The electrical connector assembly of claim 50,  
wherein said planar sections of said male power contacts and  
said female power contacts are connected along only a portion  
of their length.

52. The electrical connector assembly of claim 38,  
wherein said power contact fingers of said first electrical  
connector are resiliently deformable inwardly during mating  
with the power contacts of said second electrical connector.

53. The electrical connector of claim 38, wherein said  
signal contacts and said power contacts of both said first and  
second connectors are recessed within said respective  
 housings.

54. The electrical connector of claim 53, wherein said  
first and second electrical connectors further include shield  
members which substantially enclose said respective housings.